

Pressure Testing Training – The Need

- UKOPA Presentation

Grange Manor Hotel, Grangemouth.

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UKOPA/03/0081

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Pressure Testing Training

– Why the Need

All employers have a duty of care under the Health & Safety at Work Act to ensure that its personnel are not exposed to unidentified risk, nor should they be given responsibilities for which they have insufficient ability, awareness or training.

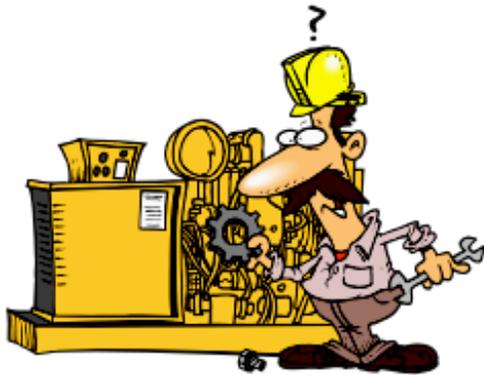
Transco therefore, has a responsibility to ensure that it is adequately managing its contractors and that the process is clearly defined.



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Pressure Testing Training

– Why the Need



Pressure testing is an activity which is seen by many as a task which requires a low skill set, little planning, is a low risk activity and requires few personnel.



In real terms, the hydrotest is the ultimate NDT activity, proving the pipeline or vessel 'fit for purpose' and has project timescale constraints imposed. The degree of experience and technical competency is no less than that required of a front end welding inspector which require clearly prescribed approvals.

Pressure Testing Training

– Who Provides

Transco currently uses the services of GWINTO (Gas & Water Industry National Training Organisation), to provide approved, skill related training to its employees.



The CITB (Construction Industry Training Board) is used by its members to provide a similar service to its employees and support teams.

Neither group provide an accredited training programme for pressure testing.

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Pressure Testing Training

– Problem Areas

Audit & Inspection Findings



- Insufficient planning at conceptual/detail design
- Lost time due to a failure to agree the procedure
- Confusion over standards requirements – individuals interpretation
- Lack of identification of risks
- Lack of consistency in approach and detail of method statements
- Poor documentation – omitted data
- Non-compliance with policies and procedures

Pressure Testing Training

– Workshop Sponsors.

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➤ Qserve

➤ *Murphy Group*

➤ AMEC

➤ Laing

➤ McAlpine

➤ Lawrence

➤ HSE

➤ HTC

➤ Nacap

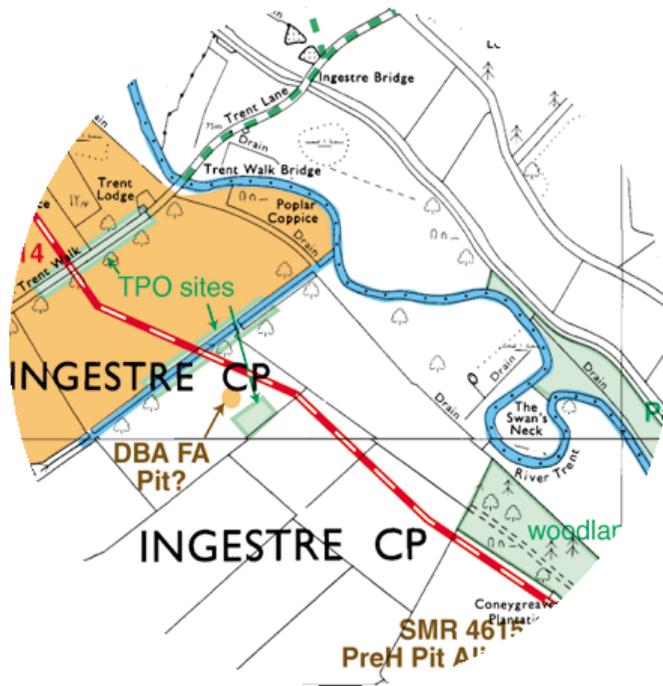
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Pressure Testing Training – Workshop Findings.

Who Would Benefit



- **Client** – Project Services/Contract Managers/Networks
- **Contractor** – Designer/Principal Sub Contractor
- **Originator** – Designer/Engineer
- **Doer** – Contractor/Supervisors
- **Consultants**
- **Auditors**
- **HSE**

Pressure Testing Training – Workshop Findings.

Category & Delegates



➤ **Theory/Awareness**

- Contract Managers(Client)
- Contract Managers(Contractor)
- Designers
- Planning Supervisors
- Project Supervisors
- Q/A Advisors
- HSE
- SHE Auditors
- Test Engineers

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Pressure Testing Training – Workshop Findings.

Category & Content



➤ **Theory/Awareness**

- Codes and Legislation
- Processes
- Method Statements
- Risk Assessments
- Notifications & Licences
- Project Scope
- Plant & Equipment
- The Environment
- Records
- Troubleshooting

Pressure Testing Training – Workshop Findings.

Category & Delegates



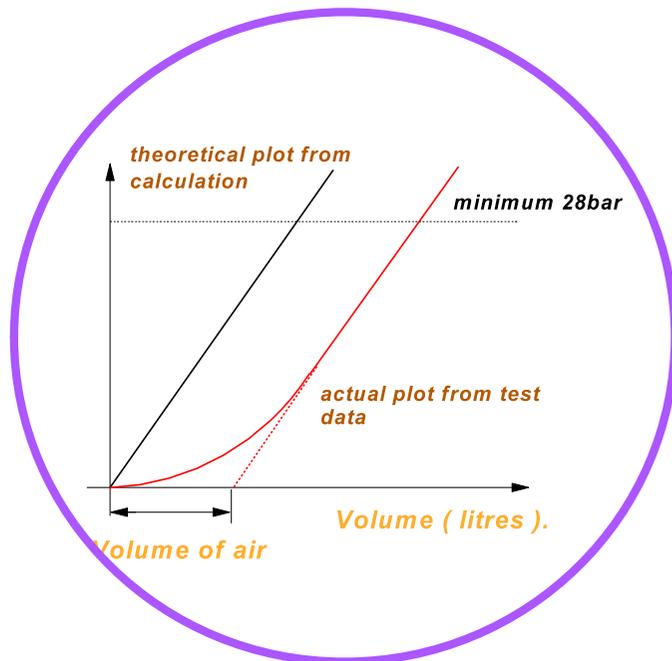
➤ **Technical**

- Project Managers(Client)
- Test Engineer
- Approvers
- Design Coordinators
- Specialist Engineers
- Auditors

Pressure Testing Training

– Workshop Findings.

Category & Content



➤ Technical

- Test Limits
- Acceptance Criteria
- Test Sections
- Air Content
- Temp Measurement/Correction
- Drying Requirements
- Q/A Records/Equipment
- Pigging
- Exclusion Zones

Pressure Testing Training – Workshop Findings.

Category & Delegates



➤ **Practical**

- Contract Supervisors
- Test Engineer
- Testing Personnel
- HSE Personnel
- Auditors

Pressure Testing Training – Workshop Findings.

Category & Content



➤ **Practical**

- Code Overview - Procedures
- Equipment - Choice
- Equipment - Capability
- Safety - PPE
- Manual Handling/Lifting
- Barriers
- Tools
- Hazards
- Environment
- Plant Positioning

Pressure Testing Training – Workshop Deliverables.

Course Duration & Timescales



➤ **Theory/Awareness**

- 1 to 2 days
- November 2003

➤ **Technical**

- 1 day (with pre-work)
- January 2004

➤ **Practical**

- 4 to 5 days (TBA).
- March 2004

➤ **Refresher (Theory/Practical)**

- ½ to 1 day (TBA).

Pressure Testing Training – Workshop Deliverables.

Approvals



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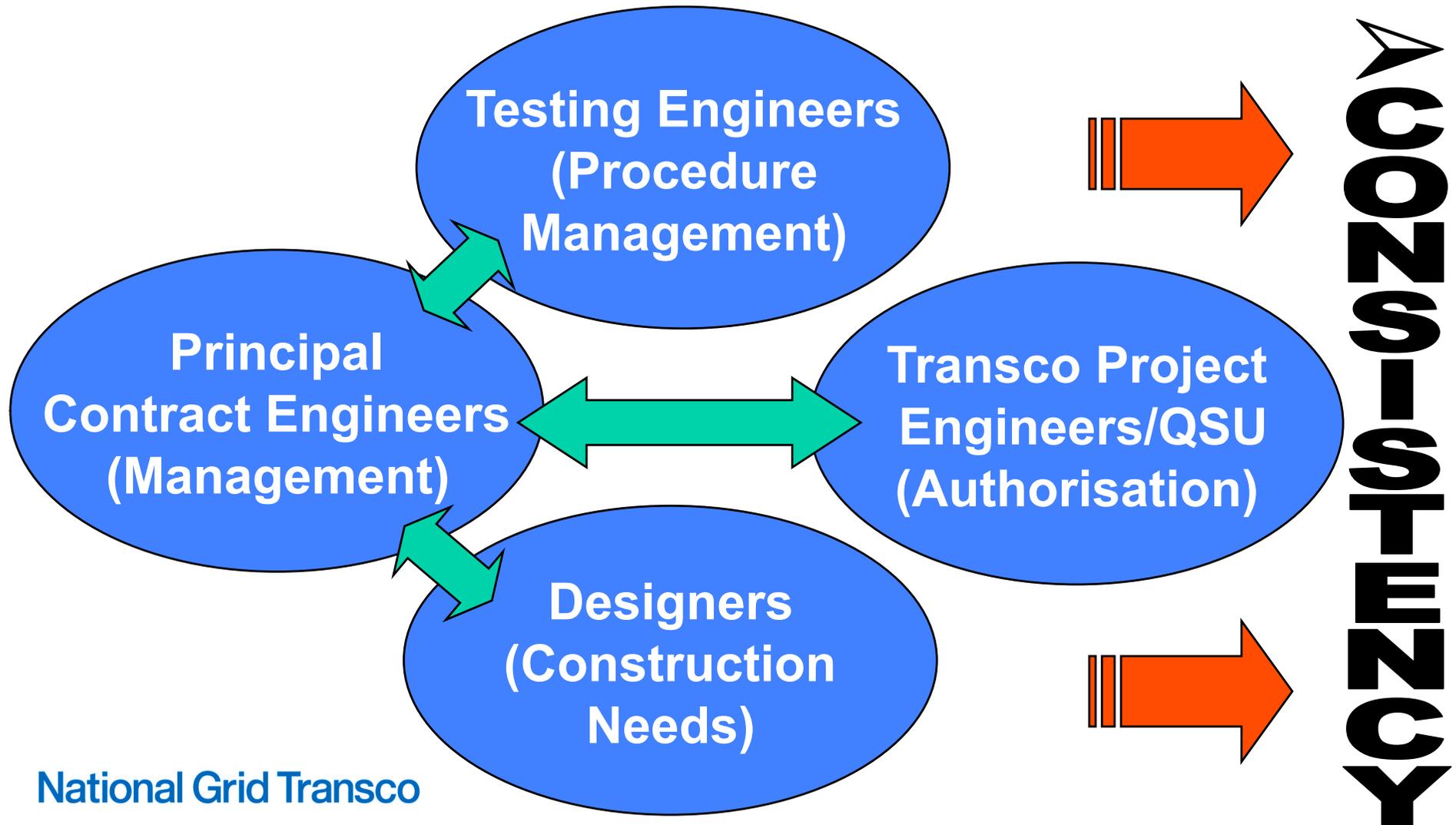
- **Theory/Awareness**
 - Certification of Attendance

- **Technical**
 - GWINTO Accreditation

- **Practical**
 - GWINTO Accreditation

- **Refresher (Theory/Practical)**
 - Certification of Attendance

Pressure Testing Training – Why.



Pressure Testing Training – Key Benefits

In Summary

- ⇒ Improved planning delivers safer working practices
- reduction in numbers of incidents/injuries
- ⇒ Improved planning reduces costs and delivers increased efficiencies - reduction in lost production.
- ⇒ A trained workforce ensures consistency, increases awareness and maintains skill levels.
- ⇒ A trained workforce delivers a minimum standard of workmanship and benefits to all.



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